

Florida International University

Summer 2022 Capstone II Project

Make My Day!

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SUMMARY

Students are constantly learning new information in the courses they take in school. Studying and reviewing this information on a consistent basis serves to improve retention. Make My Day! aims to help students remember what they've learned in class by sending them daily questions that are relevant to their courses' material. Course instructors can create custom question banks for their courses and provide explanations for each answer to further their students' understanding.

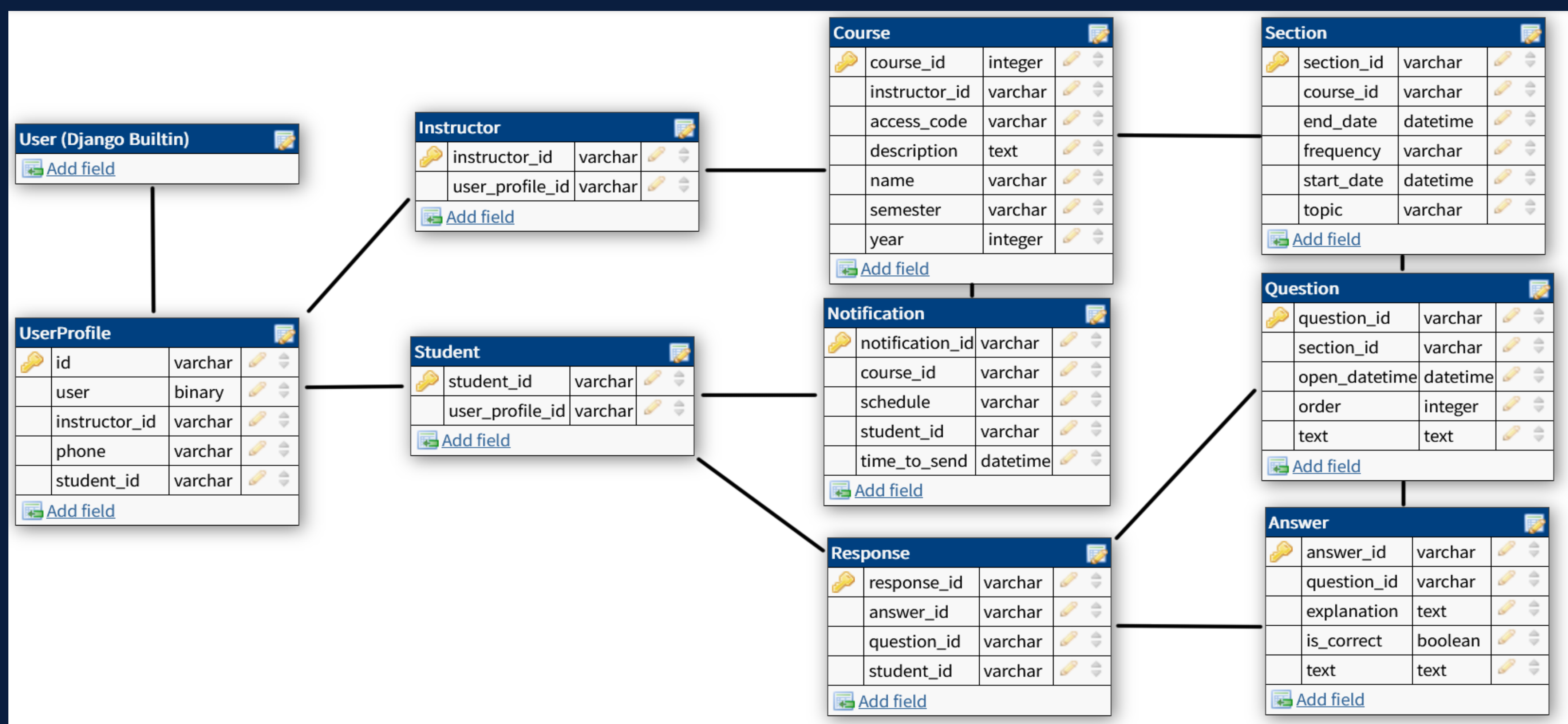
STATISTICS PAGE

Statistics for Netcentric Computing	
Application Layer	
Student	Score
Test Student 2	100.0
Test Student 1	50.0
Transport Layer	
Student	Score
Test Student 1	75.0
Internet Layer	
Student	Score
Test Student 2	33.33

REQUIREMENTS

- Instructors should be able to:
 - Create/edit a course.
 - Create/edit sections on a per-course basis.
 - Create/edit questions and provide explanations for each answer option.
 - View performance statistics for their students.
- Students should be able to:
 - Register for courses.
 - Customize when new questions are sent via email or text message.
- The system should be:
 - Highly scalable with the ability to manage hundreds of courses, instructors, students, questions, and responses.

DATABASE DIAGRAM



PERSONAL CONTRIBUTIONS

- Designed and implemented the logic for the statistics page.
- The statistics page provides information on student performance to course instructors.
- Created a per-course and a per-section view for statistics.
- Ensured confidentiality of statistics by adding security checks to confirm the current user is an instructor for the requested course.
- Leveraged the django-tables2 framework to display student scores in an organized and uniform format.
- Utilized Django queries to efficiently pull student information from the database.
- Assisted team members with bugs they encountered during the development process.

VERIFICATION

- We do not have an automated testing framework set up for the project in its current iteration.
- Verification and testing were carried out manually by the team.
- To ensure the statistics page was functioning properly:
 - Multiple student accounts were created.
 - An instructor was created.
 - Courses, sections, questions, answers were added to the database.
 - I used the test student accounts to answer several questions.
 - I verified the scores were calculated and displayed according to specifications.

TECHNOLOGIES

